DISTRICT OF COLUMBIA BUILDING CODE ADVISORY COMMITTEE

c/o **DCRA/BLRA · 941 North Capitol Street, NE, Ste. 2000 · Washington, DC 20002**

CODE CHANGE PROPOSAL FORM — 2003 ICC FAMILY OF CODES

CODE	IBC	**SECTION NO.**	716.5.3.1	**SUBCOMMITTEE AMENDMENT NO.**	FLS-3		
PROPOSING SUBCOMMITTEE	FLS	**CHAIR**	Devlin	**PHONE**	301/220-1212	**E-mail**	john_devlin@schirmereng.com
DATES: OF PROPOSAL	04/20/05	**BCAC PRESENTATION**	04/20/05	**BCAC APPROVAL**			

CHECK ONE ☑ ***Revise section to read as follows:*** ❑ ***Delete section and substitute the following*:**
❑ ***Add new section to read as follows:*** ❑ ***Delete section without substitution*.**

TYPE ALL TEXT IN 12-POINT TIMES NEW ROMAN FONT
~~***LINE THROUGH TEXT TO BE DELETED***~~ *(highlight text, under Format, click font and check strikethrough)*
UNDERLINE TEXT TO BE ADDED

716.5.3.1 Penetrations of shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

~~1. Fire dampers are not required at penetrations of shafts where:~~

~~1.1. Steel exhaust subducts extended at least 22 inches (559 mm) vertically in exhaust shafts provided there is a continuous airflow upward to the outside, or~~

~~1.2. Penetrations are tested in accordance with ASTM E 119 as part of the rated assembly, or~~

~~1.3. Ducts are used as part of an approved smoke control system designed and installed in accordance with Section 909, and where the fire damper will interfere with the operation of the smoke control system, or~~

~~1.4. The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.~~

~~2. In Group B occupancies, equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, smoke dampers are not required at penetrations of shafts where:~~

~~2.1. Bathroom and toilet room exhaust openings with steel exhaust subducts, having a wall thickness of at least 0.019 inches (0.48 mm) that extend at least 22 inches (559 mm) vertically and the exhaust fan at the upper terminus, powered continuously in accordance with the provisions of Section 909.11, maintains airflow upward to the outside, or~~

~~2.2. Ducts are used as part of an approved smoke control system, designed and installed in accordance with Section 909, and where the smoke damper will interfere with the operation of the smoke control system, or~~

~~3. Smoke dampers are not required at penetration of exhaust or supply shafts in parking garages that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.~~

1. Fire and smoke dampers are not required where steel exhaust sub-ducts extend at least 22 inches (559 mm) vertically in exhaust shafts provided there is a continuous airflow upward to the outside.

2. Fire dampers are not required where penetrations are tested in accordance with ASTM E119 as part of the fire resistance rated assembly.

3. Fire and smoke dampers are not required where ducts are used as part of an approved smoke-control system in accordance with Section 909.

4. Fire and smoke dampers are not required where the penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.

5. Smoke dampers are not required where the building is protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.

Anticipated impact of code change on cost of construction (CHECK ONE)

❑ ***Increase*** ☑***Decrease*** ❑ ***Negligible*** ❑ ***Unknown***

If "Increase" box was checked, indicate estimated range of added cost:

Per 1,000 SF single-family dwelling	***$***	***to***	***$***
Per 1,000SF of commercial building	***$***	***to***	***$***

JUSTIFICATION OF CHANGE:

Required the installation of smoke dampers in addition to fire dampers at penetrations of shaft enclosures creates an economic hardship on the owner without a clear justification based on considerations of protection of safety, health and welfare of the building occupants or population at large. There is no data that shows the omission of smoke dampers at penetrations of shaft enclosures fails to provide a fire safe building. The installation of smoke dampers at shaft penetrations creates maintenance and operational conditions that may render these devices ineffective when required to perform. In addition, these devices increase the building construction cost and operations maintenance costs and provide little or no benefit in improved building fire safety.